Leaps AND Bounds

TOWARD Math Understanding

Correlation to Ontario Curriculum and Grade 6 Resources

Leaps and Bounds 5/6 *is a math intervention resource.*

GRADE 6 Core Resources Correlation with Grade 6 core resources			**INTERVENTION Resources and Expectations** Correlation between *Leaps and Bounds 5/6* and prerequisite expectations from Ontario Grades 3 to 5			
Number: Rational Numbers				**Number: Whole Numbers**		
Grade 6 Ontario expectations	***Nelson Mathematics 6***	***Math Path 6***	**Leaps and Bounds 5/6 Topics**	**Grade 5 Ontario expectations**	**Grade 4 Ontario expectations**	**Grade 3 Ontario expectations**
B1.1 read and represent whole numbers up to and including one million, using appropriate tools and strategies, and describe various ways they are used in everyday life	Chapter 2 Getting Started, 2.1, 2.2, 2.4, 2.5, Chapter 2 Task	1.1, 1.2, 1.3	**Representing Whole Numbers** *Pathway 1:* Representing Numbers to 100 000 *Pathway 2:* Representing Numbers to 10 000 *Pathway 3:* Representing Numbers to 1000 *Pathway 4:* Multiplying and Dividing by 10s	B1.1 read, represent, compose, and decompose whole numbers up to and including 100 000, using appropriate tools and strategies, and describe various ways they are used in everyday life	B1.1 read, represent, compose, and decompose whole numbers up to and including 10 000, using appropriate tools and strategies, and describe various ways they are used in everyday life B1.3 round whole numbers to the nearest ten, hundred, or thousand, in various contexts	B1.1 read, represent, compose, and decompose whole numbers up to and including 1000, using a variety of tools and strategies, and describe various ways they are used in everyday life B1.3 round whole numbers to the nearest ten or hundred, in various contexts B1.4 count to 1000, including by 50s, 100s, and 200s, using a variety of tools and strategies B1.5 use place value when describing and representing multi-digit numbers in a variety of

						ways, including with base ten materials
B1.2 read and represent integers, using a variety of tools and strategies, including horizontal and vertical number lines		9.1				
B1.3 compare and order integers, decimal numbers, and fractions, separately and in combination, in various contexts	Chapter 2 Math Game (Close as Your Can), 2.6, Chapter 2 Task, Chapter 12 Getting Started, 12.1, 12.2, 12.3 expectation partially addressed	9.3	**Comparing Fractions** *Pathway 2:* Equivalent Fractions *Pathway 3:* Comparing: Same Numerators *Pathway 4:* Comparing: Same Denominators *Pathway 5:* Comparing Fractions to 1/2 and 1 **Comparing Decimals** *Pathway 3:* Comparing Tenths and Hundredths	B1.2 compare and order whole numbers up to and including 100 000, in various contexts	B1.2 compare and order whole numbers up to and including 10 000, in various contexts	B1.2 compare and order whole numbers up to and including 1000, in various contexts
Number: Fractions, Decimals, and Percents					**Number: Fractions and Decimals**	**Number: Fractions**
Grade 6 Ontario expectations	***Nelson Mathematics 6***	***Math Path 6***	**Leaps and Bounds 5/6 Topics**	**Grade 5 Ontario expectations**	**Grade 4 Ontario expectations**	**Grade 3 Ontario expectations**
B1.4 read, represent, compare, and order decimal numbers up to thousandths, in various contexts	2.6, Chapter 2 Math Game (Close as Your Can), 2.8, Chapter 2 Task	4.1, 4.3	**Representing Decimals** *Pathway 1:* Representing Thousandths *Pathway 2:* Representing Hundredths *Pathway 3:* Representing Tenths **Comparing Decimals** *Pathway 1:* Comparing Mixed Decimals *Pathway 2:* Comparing Thousandths *Pathway 3:* Comparing Tenths and Hundredths	B1.3 represent equivalent fractions from halves to twelfths, including improper fractions and mixed numbers, using appropriate tools, in various contexts B1.4 compare and order fractions from halves to twelfths, including improper fractions and mixed numbers, in various contexts	B1.4 represent fractions from halves to tenths using drawings, tools, and standard fractional notation, and explain the meanings of the denominator and the numerator B1.5 use drawings and models to represent, compare, and order fractions representing the individual portions that result from two	B1.6 use drawings to represent, solve, and compare the results of fair-share problems that involve sharing up to 20 items among 2, 3, 4, 5, 6, 8, and 10 sharers, including problems that result in whole numbers, mixed numbers, and fractional amounts B1.7 represent and solve fair-share problems that focus on determining and using

				B1.5 read, represent, compare, and order decimal numbers up to hundredths, in various contexts	different fair-share scenarios involving any combination of 2, 3, 4, 5, 6, 8, and 10 sharers B1.6 count to 10 by halves, thirds, fourths, fifths, sixths, eighths, and tenths, with and without the use of tools B1.7 read, represent, compare, and order decimal tenths, in various contexts	equivalent fractions, including problems that involve halves, fourths, and eighths; thirds and sixths; and fifths and tenths
B1.5 round decimal numbers, both terminating and repeating, to the nearest tenth, hundredth, or whole number, as applicable, in various contexts	2.7, Chapter 2 Task expectation partially addressed	4.2, 4.3		B1.6 round decimal numbers to the nearest tenth, in various contexts	B1.8 round decimal numbers to the nearest whole number, in various contexts	
B1.6 describe relationships and show equivalences among fractions and decimal numbers up to thousandths, using appropriate tools and drawings, in various contexts	2.6, 9.6, Chapter 9 Curious Math (Decimal Equivalents), 12.3	7.1, 7.3	**Representing Fractions** *Pathway 1:* Improper Fractions: Parts of Sets *Pathway 2:* Improper Fractions: Parts of Wholes *Pathway 3:* Proper Fractions: Parts of Sets *Pathway 4:* Proper Fractions: Parts of Wholes **Comparing Fractions** *Pathway 1:* Fractions More and Less Than 1 *Pathway 2:* Equivalent Fractions	B1.7 describe relationships and show equivalences among fractions, decimal numbers up to hundredths, and whole number percents, using appropriate tools and drawings, in various contexts	B1.9 describe relationships and show equivalences among fractions and decimal tenths, in various contexts	

			Pathway 3: Comparing: Same Numerators *Pathway 4:* Comparing: Same Denominators *Pathway 5:* Comparing Fractions to 1/2 and 1 **Representing Decimals** *Pathway 1:* Representing Thousandths *Pathway 2:* Representing Hundredths *Pathway 3:* Representing Tenths			
Number: Properties and Relationships						
Grade 6 Ontario expectations	***Nelson Mathematics 6***	***Math Path 6***	**Leaps and Bounds 5/6 Topics**	**Grade 5 Ontario expectations**	**Grade 4 Ontario expectations**	**Grade 3 Ontario expectations**
B2.1 use the properties of operations, and the relationships between operations, to solve problems involving whole numbers, decimal numbers, fractions, ratios, rates, and whole number percents, including those requiring multiple steps or multiple operations	Chapter 1 Curious Math (Math Magic), Chapter 1 Mental Math (Pairing to Multiply), Chapter 3 Mental Math (Determining Missing Decimals), Chapter 4 Getting Started, 4.1, 4.2, 4.4, 4.5, 4.7, Chapter 4 Mental Math (Using Whole Numbers to Add and Subtract Decimals), 4.8, Chapter 4 Task, Chapter 6 Getting Started, Chapter 6 Mental Math (Halving and Doubling to	2.3	**Multiplying Whole Numbers** *Pathway 3:* Multiplication Fact Strategies **Dividing Whole Numbers** *Pathway 3:* Division Fact Strategies **Relating Situations to Operations** *Pathway 1:* Division Situations *Pathway 2:* Multiplication Situations *Pathway 3:* Subtraction Situations	B2.1 use the properties of operations, and the relationships between operations, to solve problems involving whole numbers and decimal numbers, including those requiring more than one operation, and check calculations	B2.1 use the properties of operations, and the relationships between addition, subtraction, multiplication, and division, to solve problems involving whole numbers, including those requiring more than one operation, and check calculations	B2.1 use the properties of operations, and the relationships between multiplication and division, to solve problems and check calculations

	Multiply), 6.6, 6.11, 6.12, Chapter 6 Task, Chapter 9 Getting Started, Chapter 9 Mental Math (Multiplying by 5 and 50), 9.6, Chapter 10 Getting Started, Chapter 10 Curious Math (Dividing Magic Squares), 10.5, Chapter 12 Mental Math (Using Factors to Multiply), 12.4, 12.5, 12.6, 12.7, 12.8, 12.9, 12.10, Chapter 12 Math Game (Ratio Concentration), Chapter 12 Task expectation partially addressed					
Number: Math Facts						
Grade 6 Ontario expectations	***Nelson Mathematics 6***	***Math Path 6***	**Leaps and Bounds 5/6 Topics**	**Grade 5 Ontario expectations**	**Grade 4 Ontario expectations**	**Grade 3 Ontario expectations**
B2.2 understand and use the divisibility rules to determine whether a number is divisible by 2, 3, 4, 5, 6, 8, 9, and 10		2.1, 2.2		B2.2 recall and demonstrate multiplication facts from 0 × 0 to 12 × 12, and related division facts	B2.2 recall and demonstrate multiplication facts for 1 × 1 to 10 × 10, and related division facts	B2.2 recall and demonstrate multiplication facts of 2, 5, and 10, and related division facts
Number: Mental Math						
Grade 6 Ontario expectations	***Nelson Mathematics 6***	***Math Path 6***	**Leaps and Bounds 5/6 Topics**	**Grade 5 Ontario expectations**	**Grade 4 Ontario expectations**	**Grade 3 Ontario expectations**

B2.3 use mental math strategies to calculate percents of whole numbers including 1%, 5%, 10%, 15%, 25%, and 50%, and explain the strategies used	12.8	7.2, 7.3		B2.3 use mental math strategies to multiply whole numbers by 0.1 and 0.01 and estimate sums and differences of decimal numbers up to hundredths, and explain the strategies used	B2.3 use mental math strategies to multiply whole numbers by 10, 100, and 1000, divide whole numbers by 10, and add and subtract decimal tenths, and explain the strategies used	B2.3 use mental math strategies, including estimation, to add and subtract whole numbers that add up to no more than 1000, and explain the strategies used
Number: Addition and Subtraction						
Grade 6 Ontario expectations	***Nelson Mathematics 6***	***Math Path 6***	**Leaps and Bounds 5/6 Topics**	**Grade 5 Ontario expectations**	**Grade 4 Ontario expectations**	**Grade 3 Ontario expectations**
B2.4 represent and solve problems involving the addition and subtraction of whole numbers and decimal numbers, using estimation and algorithms	Chapter 3 Mental Math (Determining Missing Decimals), Chapter 4 Getting Started, 4.1, 4.2, 4.3, 4.4, Chapter 4 Curious Math (Subtracting in a Different Way) 4.5, Chapter 4 Math Game (Mental Math with Money), 4.6, 4.7, Chapter 4 Mental Math (Using Whole Numbers to Add and Subtract Decimals), 4.8, Chapter 4 Task, Chapter 10 Mental Math (Adding Decimals by Renaming)	3.1, 5.1, 5.2, 5.6	**Adding and Subtracting** *Pathway 1:* Different Number of Digits *Pathway 2:* Same Number of Digits *Pathway 3:* Using Mental Math to Subtract *Pathway 4:* Using Mental Math to Add **Relating Situations to Operations** *Pathway 3:* Subtraction Situations **Decimal Computation** *Pathway 2:* Add and Subtract to Thousandths *Pathway 3:* Add and Subtract Thousandths *Pathway 4:* Add and Subtract to Hundredths *Pathway 5:* Add and Subtract Hundredths	B2.4 represent and solve problems involving the addition and subtraction of whole numbers that add up to no more than 100 000, and of decimal numbers up to hundredths, using appropriate tools, strategies, and algorithms	B2.4 represent and solve problems involving the addition and subtraction of whole numbers that add up to no more than 10 000 and of decimal tenths, using appropriate tools and strategies, including algorithms	B2.4 demonstrate an understanding of algorithms for adding and subtracting whole numbers by making connections to and describing the way other tools and strategies are used to add and subtract B2.5 represent and solve problems involving the addition and subtraction of whole numbers that add up to no more than 1000, using various tools and algorithms
B2.5 add and subtract fractions with like and unlike denominators,		6.1, 6.2		B2.5 add and subtract fractions with like		

using appropriate tools, in various contexts				denominators, in various contexts		
Number: Multiplication and Division						
Grade 6 Ontario expectations	***Nelson Mathematics 6***	***Math Path 6***	**Leaps and Bounds 5/6 Topics**	**Grade 5 Ontario expectations**	**Grade 4 Ontario expectations**	**Grade 3 Ontario expectations**
B2.6 represent composite numbers as a product of their prime factors, including through the use of factor trees	6.1, Chapter 6 Curious Math (Separating Primes from Composites)	2.1, 2.2				
B2.7 represent and solve problems involving the multiplication of three-digit whole numbers by decimal tenths, using algorithms	Chapter 1 Mental Math (Pairing to Multiply), Chapter 9 Getting Started, 9.1, 9.3, 9.5, 9.6, 9.7, Chapter 9 Math Game (Race to 50), Chapter 9 Task expectation partially addressed	5.3, 5.6	**Multiplying Whole Numbers** *Pathway 1:* Multiplying Two-Digit Numbers *Pathway 2:* Multiplying One-Digit Numbers *Pathway 3:* Multiplication Fact Strategies	B2.6 represent and solve problems involving the multiplication of two-digit whole numbers by two-digit whole numbers using the area model and using algorithms, and make connections between the two methods	B2.5 represent and solve problems involving the multiplication of two- or three-digit whole numbers by one-digit whole numbers and by 10, 100, and 1000, using appropriate tools, including arrays	B2.6 represent multiplication of numbers up to 10 × 10 and division up to 100 ÷ 10, using a variety of tools and drawings, including arrays B2.7 represent and solve problems involving multiplication and division, including problems that involve groups of one-half, one-fourth, and one-third, using tools and drawings
B2.8 represent and solve problems involving the division of three-digit whole numbers by decimal tenths, using appropriate tools, strategies, and algorithms, and expressing remainders as appropriate		5.4, 5.6	**Dividing Whole Numbers** *Pathway 1:* Dividing Three-Digit Numbers *Pathway 2:* Dividing Two-Digit Numbers *Pathway 3:* Division Fact Strategies	B2.7 represent and solve problems involving the division of three-digit whole numbers by two-digit whole numbers using the area model and using algorithms, and make connections between the two methods, while expressing any	B2.6 represent and solve problems involving the division of two- or three-digit whole numbers by one-digit whole numbers, expressing any remainder as a fraction when appropriate, using appropriate tools, including arrays	B2.6 represent multiplication of numbers up to 10 × 10 and division up to 100 ÷ 10, using a variety of tools and drawings, including arrays B2.7 represent and solve problems involving multiplication and division, including problems that involve

				remainder appropriately		groups of one-half, one-fourth, and one-third, using tools and drawings
B2.9 multiply whole numbers by proper fractions, using appropriate tools and strategies		6.3		B2.8 multiply and divide one-digit whole numbers by unit fractions, using appropriate tools and drawings	B2.7 represent the relationship between the repeated addition of a unit fraction and the multiplication of that unit fraction by a whole number, using tools, drawings, and standard fractional notation	B2.8 represent the connection between the numerator of a fraction and the repeated addition of the unit fraction with the same denominator using various tools and drawings, and standard fractional notation
B2.10 divide whole numbers by proper fractions, using appropriate tools and strategies		6.4		B2.8 multiply and divide one-digit whole numbers by unit fractions, using appropriate tools and drawings		
B2.11 represent and solve problems involving the division of decimal numbers up to thousandths by whole numbers up to 10, using appropriate tools and strategies	Chapter 2 Mental Math (Dividing Decimals by Renaming), Chapter 10 Getting Started, 10.1, Chapter 10 Math Game (Estimate the Range), 10.2, 10.3, Chapter 10 Curious Math (Dividing Magic Squares), 10.5, Chapter 10 Task	5.5, 5.6				
B2.12 solve problems involving ratios, including percents and rates, using appropriate tools and strategies	12.4, 12.5, 12.6, 12.7, 12.8, 12.9, 12.10, Chapter 12 Task	8.1, 8.2, 8.3		B2.9 represent and create equivalent ratios and rates, using a variety of tools and	B2.8 show simple multiplicative relationships involving whole-number rates, using	B2.9 use the ratios of 1 to 2, 1 to 5, and 1 to 10 to scale up numbers and to solve problems

				models, in various contexts	various tools and drawings	
Algebra: Patterns						
Grade 6 Ontario expectations	***Nelson Mathematics 6***	***Math Path 6***	**Leaps and Bounds 5/6 Topics**	**Grade 5 Ontario expectations**	**Grade 4 Ontario expectations**	**Grade 3 Ontario expectations**
C1.1 identify and describe repeating, growing, and shrinking patterns, including patterns found in real-life contexts, and specify which growing patterns are linear	Chapter 1 Getting Started, 1.1, 1.2, 1.3, 1.4, 1.5, Chapter 1 Curious Math (Rice on a Chessboard), 1.6, Chapter 1 Task, 3.3, 3.7, 5.4, Chapter 14 Getting Started expectation partially addressed	14.3, 15.1	**Patterns** *Pathway 2:* Growing and Shrinking Patterns *Pathway 3:* Repeating Patterns	C1.1 identify and describe repeating, growing, and shrinking patterns, including patterns found in real-life contexts	C1.1 identify and describe repeating and growing patterns, including patterns found in real-life contexts	C1.1 identify and describe repeating elements and operations in a variety of patterns, including patterns found in real-life contexts
C1.2 create and translate repeating, growing, and shrinking patterns using various representations, including tables of values, graphs, and for linear growing patterns, algebraic expressions and equations	Chapter 1 Getting Started, 1.1, 1.2, 1.4, 1.5, Chapter 1 Curious Math (Rice on a Chessboard), 1.6, 1.7, Chapter 1 Task, 3.3, 3.7, 5.4, Chapter 14 Getting Started expectation partially addressed	15.1	**Patterns** *Pathway 2:* Growing and Shrinking Patterns *Pathway 3:* Repeating Patterns	C1.2 create and translate growing and shrinking patterns using various representations, including tables of values and graphs	C1.2 create and translate repeating and growing patterns using various representations, including tables of values and graphs	C1.2 create and translate patterns that have repeating elements, movements, or operations using various representations, including shapes, numbers, and tables of values
C1.3 determine pattern rules and use them to extend patterns, make and justify predictions, and identify missing elements in repeating, growing, and shrinking patterns, and use	Chapter 1 Getting Started, 1.1, 1.2, 1.3, 1.4, 1.5, Chapter 1 Curious Math (Rice on a Chessboard), 1.6, Chapter 1 Task, 3.3, 3.7, 5.4	15.1	**Patterns** *Pathway 1:* Using Pattern Rules *Pathway 2:* Growing and Shrinking Patterns *Pathway 3:* Repeating Patterns	C1.3 determine pattern rules and use them to extend patterns, make and justify predictions, and identify missing elements in repeating,	C1.3 determine pattern rules and use them to extend patterns, make and justify predictions, and identify missing elements in	C1.3 determine pattern rules and use them to extend patterns, make and justify predictions, and identify missing elements in patterns that have repeating

algebraic representations of the pattern rules to solve for unknown values in linear growing patterns	expectation partially addressed			growing, and shrinking patterns	repeating and growing patterns	elements, movements, or operations
C1.4 create and describe patterns to illustrate relationships among whole numbers and decimal numbers		15.1	**Representing Whole Numbers** *Pathway 1:* Representing Numbers to 100 000 *Pathway 2:* Representing Numbers to 10 000 *Pathway 3:* Representing Numbers to 1000	C1.4 create and describe patterns to illustrate relationships among whole numbers and decimal tenths and hundredths	C1.4 create and describe patterns to illustrate relationships among whole numbers and decimal tenths	C1.4 create and describe patterns to illustrate relationships among whole numbers up to 1000
Algebra: Variables and Expressions					**Algebra: Variables**	
Grade 6 Ontario expectations	***Nelson Mathematics 6***	***Math Path 6***	**Leaps and Bounds 5/6 Topics**	**Grade 5 Ontario expectations**	**Grade 4 Ontario expectations**	**Grade 3 Ontario expectations**
C2.1 add monomials with a degree of 1 that involve whole numbers, using tools		15.2				
C2.2 evaluate algebraic expressions that involve whole numbers and decimal tenths	1.3, 1.4, 1.5, 1.7 expectation partially addressed	15.2	**Equality** *Pathway 1:* Using Algebra	C2.1 translate among words, algebraic expressions, and visual representations that describe equivalent relationships C2.2 evaluate algebraic expressions that involve whole numbers	C2.1 identify and use symbols as variables in expressions and equations	C2.1 describe how variables are used, and use them in various contexts as appropriate
Algebra: Equalities and Inequalities						
Grade 6 Ontario expectations	***Nelson Mathematics 6***	***Math Path 6***	**Leaps and Bounds 5/6 Topics**	**Grade 5 Ontario expectations**	**Grade 4 Ontario expectations**	**Grade 3 Ontario expectations**
C2.3 solve equations that involve multiple terms and whole numbers in various contexts, and verify solutions	Chapter 1 Mental Math (Pairing to Multiply), 1.7, 1.8, Chapter 3 Mental Math (Determining Missing Decimals), 8.5	15.3, 15.4	**Equality** *Pathway 1:* Using Algebra *Pathway 2:* Solving Equations	C2.3 solve equations that involve whole numbers up to 100 in various contexts, and verify solutions	C2.2 solve equations that involve whole numbers up to 50 in various contexts, and verify solutions	C2.2 determine whether given sets of addition, subtraction, multiplication, and division expressions are equivalent or not

	expectation partially addressed					
C2.4 solve inequalities that involve two operations and whole numbers up to 100, and verify and graph the solutions		15.5		C2.4 solve inequalities that involve one operation and whole numbers up to 50, and verify and graph the solutions	C2.3 solve inequalities that involve addition and subtraction of whole numbers up to 20, and verify and graph the solutions	C2.3 identify and use equivalent relationships for whole numbers up to 1000, in various contexts
Algebra: Coding						
Grade 6 Ontario expectations	***Nelson Mathematics 6***	***Math Path 6***	**Leaps and Bounds 5/6 Topics**	**Grade 5 Ontario expectations**	**Grade 4 Ontario expectations**	**Grade 3 Ontario expectations**
C3.1 solve problems and create computational representations of mathematical situations by writing and executing efficient code, including code that involves conditional statements and other control structures		Coding Toolkit		C3.1 solve problems and create computational representations of mathematical situations by writing and executing code, including code that involves conditional statements and other control structures	C3.1 solve problems and create computational representations of mathematical situations by writing and executing code, including code that involves sequential, concurrent, repeating, and nested events	C3.1 solve problems and create computational representations of mathematical situations by writing and executing code, including code that involves sequential, concurrent, and repeating events
C3.2 read and alter existing code, including code that involves conditional statements and other control structures, and describe how changes to the code affect outcomes and the efficiency of the code		Coding Toolkit		C3.2 read and alter existing code, including code that involves conditional statements and other control structures, and describe how changes to the code affect the outcomes	C3.2 read and alter existing code, including code that involves sequential, concurrent, repeating, and nested events, and describe how changes to the code affect the outcomes	C3.2 read and alter existing code, including code that involves sequential, concurrent, and repeating events, and describe how changes to the code affect the outcomes
Data: Data Collection and Organization						
Grade 6 Ontario expectations	***Nelson Mathematics 6***	***Math Path 6***	**Leaps and Bounds 5/6 Topics**	**Grade 5 Ontario expectations**	**Grade 4 Ontario expectations**	**Grade 3 Ontario expectations**
D1.1 describe the difference between		16.1		D1.1 explain the importance of various	D1.1 describe the difference between	D1.1 sort sets of data about people or things

discrete and continuous data, and provide examples of each				sampling techniques for collecting a sample of data that is representative of a population	qualitative and quantitative data, and describe situations where each would be used	according to two and three attributes, using tables and logic diagrams, including Venn, Carroll, and tree diagrams, as appropriate
D1.2 collect qualitative data and discrete and continuous quantitative data to answer questions of interest about a population, and organize the sets of data as appropriate, including using intervals	Chapter 3 Getting Started, 3.1, 3.6, Chapter 3 Task expectation partially addressed	16.1	**Displaying Data** *Pathway 3:* Data: Using Double Bar Graphs *Pathway 4:* Data: Using Line Plots	D1.2 collect data, using appropriate sampling techniques as needed, to answer questions of interest about a population, and organize the data in relative-frequency tables	D1.2 collect data from different primary and secondary sources to answer questions of interest that involve comparing two or more sets of data, and organize the data in frequency tables and stem-and-leaf plots	D1.2 collect data through observations, experiments, and interviews to answer questions of interest that focus on qualitative and quantitative data, and organize the data using frequency tables
Data: Data Visualization						
Grade 6 Ontario expectations	***Nelson Mathematics 6***	***Math Path 6***	**Leaps and Bounds 5/6 Topics**	**Grade 5 Ontario expectations**	**Grade 4 Ontario expectations**	**Grade 3 Ontario expectations**
D1.3 select from among a variety of graphs, including histograms and broken-line graphs, the type of graph best suited to represent various sets of data; display the data in the graphs with proper sources, titles, and labels, and appropriate scales; and justify their choice of graphs	Chapter 3 Getting Started, 3.1, 3.3, 3.7, 3.8, 3.9, Chapter 3 Task	16.2	**Displaying Data** *Pathway 1:* Data: Using Broken-Line Graphs *Pathway 2:* Data: Using Stem-and-Leaf Plots *Pathway 3:* Data: Using Double Bar Graphs *Pathway 4:* Data: Using Line Plots	D1.3 select from among a variety of graphs, including stacked-bar graphs, the type of graph best suited to represent various sets of data; display the data in the graphs with proper sources, titles, and labels, and appropriate scales; and justify their choice of graphs	D1.3 select from among a variety of graphs, including multiple-bar graphs, the type of graph best suited to represent various sets of data; display the data in the graphs with proper sources, titles, and labels, and appropriate scales; and justify their choice of graphs	D1.3 display sets of data, using many-to-one correspondence, in pictographs and bar graphs with proper sources, titles, and labels, and appropriate scales
D1.4 create an infographic about a data set, representing the data in appropriate	Chapter 3 Getting Started, 3.1, 3.3, 3.7, 3.8, Chapter 3 Task	16.4	**Displaying Data** *Pathway 1:* Data: Using Broken-Line Graphs	D1.4 create an infographic about a data set, representing the data in appropriate	D1.4 create an infographic about a data set, representing the	

ways, including in tables, histograms, and broken-line graphs, and incorporating any other relevant information that helps to tell a story about the data	expectation partially addressed		*Pathway 2:* Data: Using Stem-and-Leaf Plots *Pathway 3:* Data: Using Double Bar Graphs *Pathway 4:* Data: Using Line Plots	ways, including in relative-frequency tables and stacked-bar graphs, and incorporating any other relevant information that helps to tell a story about the data	data in appropriate ways, including in frequency tables, stem-and-leaf plots, and multiple-bar graphs, and incorporating any other relevant information that helps to tell a story about the data	
Data: Data Analysis						
Grade 6 Ontario expectations	***Nelson Mathematics 6***	***Math Path 6***	**Leaps and Bounds 5/6 Topics**	**Grade 5 Ontario expectations**	**Grade 4 Ontario expectations**	**Grade 3 Ontario expectations**
D1.5 determine the range as a measure of spread and the measures of central tendency for various data sets, and use this information to compare two or more data sets	3.5, Chapter 3 Task expectation partially addressed	16.3	**Summarizing Data** *Pathway 1:* Using the Mean *Pathway 2:* Using the Median and Mode	D1.5 determine the mean and the median and identify the mode(s), if any, for various data sets involving whole numbers and decimal numbers, and explain what each of these measures indicates about the data	D1.5 determine the mean and the median and identify the mode(s), if any, for various data sets involving whole numbers, and explain what each of these measures indicates about the data	D1.4 determine the mean and identify the mode(s), if any, for various data sets involving whole numbers, and explain what each of these measures indicates about the data
D1.6 analyse different sets of data presented in various ways, including in histograms and broken-line graphs and in misleading graphs, by asking and answering questions about the data, challenging preconceived notions, and drawing conclusions, then make convincing arguments and informed decisions	Chapter 3 Getting Started, 3.1, 3.3, Chapter 3 Curious Math (Telling Stories about Graphs), 3.7, 3.8, Chapter 3 Task	16.5	**Displaying Data** *Pathway 1:* Data: Using Broken-Line Graphs *Pathway 2:* Data: Using Stem-and-Leaf Plots *Pathway 3:* Data: Using Double Bar Graphs *Pathway 4:* Data: Using Line Plots	D1.6 analyse different sets of data presented in various ways, including in stacked-bar graphs and in misleading graphs, by asking and answering questions about the data, challenging preconceived notions, and drawing conclusions, then make convincing arguments and informed decisions	D1.6 analyse different sets of data presented in various ways, including in stem-and-leaf plots and multiple-bar graphs, by asking and answering questions about the data and drawing conclusions, then make convincing arguments and informed decisions	D1.5 analyse different sets of data presented in various ways, including in frequency tables and in graphs with different scales, by asking and answering questions about the data and drawing conclusions, then make convincing arguments and informed decisions
Data: Probability						

Grade 6 Ontario expectations	*Nelson Mathematics 6*	*Math Path 6*	Leaps and Bounds 5/6 Topics	Grade 5 Ontario expectations	Grade 4 Ontario expectations	Grade 3 Ontario expectations
D2.1 use fractions, decimals, and percents to express the probability of events happening, represent this probability on a probability line, and use it to make predictions and informed decisions	Chapter 13 Getting Started, 13.1, Chapter 13 Mental Imagery (Visualizing Fractions on a Number Line), 13.2, 13.3, Chapter 13 Curious Math (Random Numbers and Letters), Chapter 13 Math Game (No Tails Please!), Chapter 13 Task expectation partially addressed	17.1	**Probability** *Pathway 1:* Probability: Using Numbers *Pathway 2:* Probability: Using Words	D2.1 use fractions to express the probability of events happening, represent this probability on a probability line, and use it to make predictions and informed decisions	D2.1 use mathematical language, including the terms "impossible", unlikely", equally likely", "likely", and "certain", to describe the likelihood of events happening, represent this likelihood on a probability line, and use it to make predictions and informed decisions	D2.1 use mathematical language including the terms "impossible", "unlikely", "equally likely", "likely", and "certain", to describe the likelihood of events happening, and use that likelihood to make predictions and informed decisions
D2.2 determine and compare the theoretical and experimental probabilities of two independent events happening	Chapter 13 Getting Started, 13.4, 13.5, 13.6, Chapter 13 Math Game (No Tails Please!), Chapter 13 Task	17.2	**Probability** *Pathway 1:* Probability: Using Numbers *Pathway 2:* Probability: Using Words	D2.2 determine and compare the theoretical and experimental probabilities of an event happening	D2.2 make and test predictions about the likelihood that the mean, median, and mode(s) of a data set will be the same for data collected from different populations	D2.2 make and test predictions about the likelihood that the mean and the mode(s) of a data set will be the same for data collected from different populations
Spatial Sense: Geometric Reasoning						
Grade 6 Ontario expectations	***Nelson Mathematics 6***	***Math Path 6***	**Leaps and Bounds 5/6 Topics**	**Grade 5 Ontario expectations**	**Grade 4 Ontario expectations**	**Grade 3 Ontario expectations**
E1.1 create lists of the geometric properties of various types of quadrilaterals, including the properties of the diagonals, rotational symmetry, and line symmetry	Chapter 7 Getting Started, Chapter 7 Curious Math (Folding Along Diagonals), 7.6, 14.3	13.4, 13.5	**2-D Shapes** *Pathway 2:* Classifying Rectangles *Pathway 3:* Line Symmetry	E1.1 identify geometric properties of triangles, and construct different types of triangles when given side or angle measurements	E1.1 identify geometric properties of rectangles, including the number of right angles, parallel and perpendicular sides,	E1.1 sort, construct, and identify cubes, prisms, pyramids, cylinders, and cones by comparing their faces, edges, vertices, and angles

	expectation partially addressed			E1.2 identify and construct congruent triangles, rectangles, and parallelograms	and lines of symmetry	
E1.2 construct three-dimensional objects when given their top, front, and side views	11.7, 11.8	12.2	**3-D Shapes** *Pathway 3:* Modelling with Solid Shapes	E1.3 draw top, front, and side views of objects, and match drawings with objects		E1.2 compose and decompose various structures, and identify the two-dimensional shapes and three-dimensional objects that these structures contain E1.3 identify congruent lengths, angles, and faces of three-dimensional objects by mentally and physically matching them, and determine if the objects are congruent
Spatial Sense: Location and Movement						
Grade 6 Ontario expectations	***Nelson Mathematics 6***	***Math Path 6***	**Leaps and Bounds 5/6 Topics**	**Grade 5 Ontario expectations**	**Grade 4 Ontario expectations**	**Grade 3 Ontario expectations**
E1.3 plot and read coordinates in all four quadrants of a Cartesian plane, and describe the translations that move a point from one coordinate to another		14.1	**Location and Movement** *Pathway 1:* Using Cardinal Directions on Grids *Pathway 2:* Locating Objects on Grids **Transformations** *Pathway 3:* Multiple Translations	E1.4 plot and read coordinates in the first quadrant of a Cartesian plane using various scales, and describe the translations that move a point from one coordinate to another	E1.2 plot and read coordinates in the first quadrant of a Cartesian plane, and describe the translations that move a point from one coordinate to another	
E1.4 describe and perform combinations of translations, reflections, and rotations up to 360° on a grid, and predict the results of these transformations	Chapter 14 Getting Started, 14.1, 14.2, 14.4, 14.5, 14.6, Chapter 14 Mental Imagery (Identifying	14.2, 14.3	**Transformations** *Pathway 1:* Single Rotations *Pathway 2:* Multiple Reflections *Pathway 3:* Multiple Translations	E1.5 describe and perform translations, reflections, and rotations up to 180° on a grid, and predict the results of these transformations	E1.3 describe and perform translations and reflections on a grid, and predict the results of these transformations	E1.4 give and follow multistep instructions involving movement from one location to another, including distances and half- and quarter-turns

	Transformations), Chapter 14 Task expectation partially addressed		*Pathway 4:* Single Reflections and Translations			
					Spatial Sense: Mass and Capacity	**Spatial Sense: Length, Mass, and Capacity**
Grade 6 Ontario expectations	***Nelson Mathematics 6***	***Math Path 6***	**Leaps and Bounds 5/6 Topics**	**Grade 5 Ontario expectations**	**Grade 4 Ontario expectations**	**Grade 3 Ontario expectations**
					E2.1 explain the relationships between grams and kilograms as metric units of mass, and between litres and millilitres as metric units of capacity, and use benchmarks for these units to estimate mass and capacity	E2.1 use appropriate units of length to estimate, measure, and compare the perimeters of polygons and curved shapes, and construct polygons with a given perimeter E2.2 explain the relationships between millimetres, centimetres, metres, and kilometres as metric units of length, and use benchmarks for these units to estimate lengths E2.3 use non-standard units appropriately to estimate, measure, and compare capacity, and explain the effect that overfilling or underfilling, and gaps between units, have on accuracy E2.4 compare, estimate, and measure

						the mass of various objects, using a pan balance and non-standard units E2.5 use various units of different sizes to measure the same attribute of a given item, and demonstrate that even though using different-sized units produces a different count, the size of the attribute remains the same
Spatial Sense: The Metric System						
Grade 6 Ontario expectations	***Nelson Mathematics 6***	***Math Path 6***	**Leaps and Bounds 5/6 Topics**	**Grade 5 Ontario expectations**	**Grade 4 Ontario expectations**	**Grade 3 Ontario expectations**
E2.1 measure length, area, mass, and capacity using the appropriate metric units, and solve problems that require converting smaller units to larger ones and vice versa	Chapter 5 Getting Started, 5.1, 5.2, 5.3, Chapter 5 Curious Math (Triangle Sides), Chapter 5 Math Game (Lines, Lines, Lines), 5.5, Chapter 5 Task, Chapter 8 Getting Started, 8.1, 8.5, Chapter 8 Task expectation partially addressed	10.1, 10.2	**Perimeter** *Pathway 3:* Length: Using Standard Units **Area** *Pathway 2:* Using Standard Units of Area **Mass** *Pathway 1:* Mass: Kilograms and Grams *Pathway 2:* Mass: Using One Standard Unit **Volume and Capacity** *Pathway 4:* Capacity: Litres or Millilitres	E2.1 use appropriate metric units to estimate and measure length, area, mass, and capacity E2.2 solve problems that involve converting larger metric units into smaller ones, and describe the base ten relationships among metric units	E2.2 use metric prefixes to describe the relative size of different metric units, and choose appropriate units and tools to measure length, mass, and capacity	
					Spatial Sense: Time	
Grade 6 Ontario expectations	***Nelson Mathematics 6***	***Math Path 6***	**Leaps and Bounds 5/6 Topics**	**Grade 5 Ontario expectations**	**Grade 4 Ontario expectations**	**Grade 3 Ontario expectations**
					E2.3 solve problems involving elapsed	E2.6 use analog and digital clocks and

					time by applying the relationships between different units of time	timers to tell time in hours, minutes, and seconds
Spatial Sense: Angles						
Grade 6 Ontario expectations	***Nelson Mathematics 6***	***Math Path 6***	**Leaps and Bounds 5/6 Topics**	**Grade 5 Ontario expectations**	**Grade 4 Ontario expectations**	**Grade 3 Ontario expectations**
E2.2 use a protractor to measure and construct angles up to 360°, and state the relationship between angles that are measured clockwise and those that are measured counterclockwise	Chapter 7 Getting Started, 7.1 expectation partially addressed	13.1	**Angles** *Pathway 1:* Measuring and Drawing Angles *Pathway 2:* Comparing Angles	E2.3 compare angles and determine their relative size by matching them and by measuring them using appropriate non-standard units E2.4 explain how protractors work, use them to measure and construct angles up to 180°, and use benchmark angles to estimate the size of other angles	E2.4 identify angles and classify them as right, straight, acute, or obtuse	
E2.3 use the properties of supplementary angles, complementary angles, opposite angles, and interior and exterior angles to solve for unknown angle measures		13.2, 13.3				
Spatial Sense: Area and Surface Area				**Spatial Sense: Area**		
Grade 6 Ontario expectations	***Nelson Mathematics 6***	***Math Path 6***	**Leaps and Bounds 5/6 Topics**	**Grade 5 Ontario expectations**	**Grade 4 Ontario expectations**	**Grade 3 Ontario expectations**
E2.4 determine the areas of trapezoids, rhombuses, kites, and composite polygons by decomposing them into shapes with known areas		11.1, 11.2, 11.3	**Area** *Pathway 1:* Area of a Rectangle *Pathway 2:* Using Standard Units of Area	E2.5 use the area relationships among rectangles, parallelograms, and triangles to develop the formulas for the area of a parallelogram	E2.5 use the row and column structure of an array to measure the areas of rectangles and to show that the area of any rectangle can be	E2.7 compare the areas of two-dimensional shapes by matching, covering, or decomposing and recomposing the shapes, and

				and the area of a triangle, and solve related problems E2.6 show that two-dimensional shapes with the same area can have different perimeters, and solve related problems	found by multiplying its side lengths E2.6 apply the formula for the area of a rectangle to find the unknown measurement when given two of the three	demonstrate that different shapes can have the same area E2.8 use appropriate non-standard units to measure area, and explain the effect that gaps and overlaps have on accuracy E2.9 use square centimetres (cm2) and square metres (m2) to estimate, measure, and compare the areas of various two-dimensional shapes, including those with curved sides
E2.5 create and use nets to demonstrate the relationship between the faces of prisms and pyramids and their surface areas	Chapter 11 Getting Starting, 11.1, 11.2	12.1, 12.3				
E2.6 determine the surface areas of prisms and pyramids by calculating the areas of their two-dimensional faces and adding them together	11.2, 11.4, Chapter 11 Task	12.1, 12.3				
Financial Literacy: Money Concepts						
Grade 6 Ontario expectations	***Nelson Mathematics 6***	***Math Path 6***	**Leaps and Bounds 5/6 Topics**	**Grade 5 Ontario expectations**	**Grade 4 Ontario expectations**	**Grade 3 Ontario expectations**
F1.1 describe the advantages and disadvantages of various methods of payment that can be used to				F1.1 describe several ways money can be transferred among individuals,	F1.1 identify various methods of payment that can be used to purchase goods and services	F1.1 estimate and calculate the change required for various simple cash transactions involving

purchase goods and services				organizations, and businesses F1.2 estimate and calculate the cost of transactions involving multiple items priced in dollars and cents, including sales tax, using various strategies	F1.2 estimate and calculate the cost of transactions involving multiple items priced in whole-dollar amounts, not including sales tax, and the amount of change needed when payment is made in cash, using mental math	whole-dollar amounts and amounts of less than one dollar
Financial Literacy: Financial Management						
Grade 6 Ontario expectations	***Nelson Mathematics 6***	***Math Path 6***	**Leaps and Bounds 5/6 Topics**	**Grade 5 Ontario expectations**	**Grade 4 Ontario expectations**	**Grade 3 Ontario expectations**
F1.2 identify different types of financial goals, including earning and saving goals, and outline some key steps in achieving them				F1.3 design sample basic budgets to manage finances for various earning and spending scenarios	F1.3 explain the concepts of spending, saving, earning, investing, and donating, and identify key factors to consider when making basic decisions related to each	
F1.3 identify and describe various factors that may help or interfere with reaching financial goals				F1.4 explain the concepts of credit and debt, and describe how financial decisions may be impacted by each	F1.4 explain the relationship between spending and saving, and describe how spending and saving behaviours may differ from one person to another	
Financial Literacy: Consumer and Civic Awareness						
Grade 6 Ontario expectations	***Nelson Mathematics 6***	***Math Path 6***	**Leaps and Bounds 5/6 Topics**	**Grade 5 Ontario expectations**	**Grade 4 Ontario expectations**	**Grade 3 Ontario expectations**
F1.4 explain the concept of interest rates, and identify types of interest				F1.5 calculate unit rates for various goods and services, and	F1.5 describe some ways of determining whether something	

rates and fees associated with different accounts and loans offered by various banks and other financial institutions				identify which rates offer the best value F1.6 describe the types of taxes that are collected by the different levels of government in Canada, and explain how tax revenue is used to provide services in the community	is reasonably priced and therefore a good purchase	
F1.5 describe trading, lending, borrowing, and donating as different ways to distribute financial and other resources among individuals and organizations						